Institute for Healthcare Improvement

Age-Friendly Health Systems:

Cross-Setting Measurement Guidance for Spread of the 4Ms

February 2025

ihi.org/AgeFriendly

This content was created especially for:

Age-Friendly Health Systems

An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA).

Contents

Introduction

The Age-Friendly Health Systems guides for the recognized settings (hospital and ambulatory care, nursing homes, convenient care, and home health care) describe a "recipe" for reliably integrating the 4Ms (What **M**atters, **M**edication, **M**entation, **M**obility) into your standard care in these settings. These steps include:

1. Understand your current state
2. Describe care consistent with the 4Ms
3. Design or adapt your workflow
4. Provide care consistent with the 4Ms
5. Study your performance
6. Improve and sustain care

The measures outlined in this Measures Guide help you with Step 5: Study your performance.

Below you will find a set of outcome and process measures for all five settings. They are shown together to outline the commonalities and differences across settings. You can use these measures to understand whether the changes you are making result in improvement.

In the Appendix, you will find more details on suggested measures by settings such as numerators and denominators.

We encourage you to combine these measures with an ongoing process to hold a small number of conversations with older adults, or with family or other caregivers for adults unable to speak for themselves. Gathering this qualitative data will complement the core set of numerical measures.

Stratification of Data

For each identified measure, systems are encouraged to stratify data by demographic factors including, but not limited to:

- Race & Ethnicity
- Language
- Sexual orientation
- Gender identity
- Relevant social factors
- Geography
- Insurance status/type
- Other individual factors as relevant (for example, patient portal use, BMI, immigration status)

As a reference for current recommendations, systems can refer to categories in the Office of Management and Budget core race and ethnicity factors.

Stratification of data, followed by understanding and addressing any differences that may exist in current performance, are key to achieving the Age-Friendly Health Systems movement aim to provide evidence-based care to all older adults equitably across health care systems. Systems are encouraged to start by stratifying their data at the onset of testing and implementing the 4Ms and then at least bi-yearly thereafter (more often if population sizes will allow). If differences in process or outcome measures are observed between groups, systems should then seek to understand the root causes of those differences and address them as part of their efforts to implement and spread the 4Ms across the system.

Data Collection and Display

In creating data systems to display current performance, systems are encouraged to track and display data over time in run or control charts. Ideally data should be tracked at least monthly (more frequently if possible)

More details on run and control charts can be found here <insert link>.

Currently Recommended AFHS Measures

Process Measures

	Settings of Care				
	Hospital	Ambulatory	Nursing Home	Convenient Care/Urgent Care	Home Health Care
% of older adults with What Matters documented	X	X	X	X	X
% of older adults assessed for high-risk medication use	X	X	X	X	X
% high risk medications with pharmacist/clinician review	X	X	X		X
% of older adults on any of the targeted medications	X	X	X		X
% of older adults assessed for delirium	X		X		X
% of older adults assessed for cognitive impairment		X	X	X	X
% of older adults assessed for depression		X	X	X	X
% of older adults assessed for Mobility	X	X	X	X	X
% older adults mobilized at least 3 times/day (as appropriate)	X		X		
% of patients with a documented mobility goal		X			X
% of older adults being assessed for all 4Ms	X	X	X	X	X

Outcome Measures	Settings of Care				
	Hospital	Ambulatory	Nursing Home	Convenient Care/Urgent Care	Home Health Care
30-day all-cause readmission	X		X		X
Rate of emergency department (ED) visits		X	X		X
Facility free days		X			
Average length of stay	X		X		
Discharge disposition: % of older adults discharged back to home	X				
% of older adults with a diagnosis of delirium	X		X		
Falls rate	X		X		
Pressure ulcer rate	X		X		
Rate of return visits to convenient care/urgent care				X	
Patient experience question related to addressing what matters	X	X	X	X	X

Note on outcome measures: The proposed outcome measures reflect the metrics most commonly tracked by health systems. These metrics often align with metrics health systems were/are tracking before starting to test and implement the 4Ms and in many cases can be used to support calculating return on investment of the 4Ms. Health systems are encouraged to choose 1–2 metrics from this list or other metrics that are important to their health system and can show the impact of the 4Ms on the health, experience and cost of care for older adults in each setting, and across settings. Additional ideas for both process and outcomes measures can be found at the 4Ms Evaluation Metrics Resource Library.

Appendix

Appendix A: Detailed Hospital Measures

Measure	Denominator	Numerator	Notes
Process Measures			
% of older adults assessed for all 4Ms	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who have been assessed for all 4Ms as per the 4Ms description approved for the setting of care.	This measure is to be submitted every month if you have recognized sites in this setting.
% of older adults with What matters documented (in chart or other location visible to care team)	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who have had what matters documented in their chart at least once during their hospital stay.	The documentation of 'What matters' in the chart is an easier measure to be tracked at scale from electronic records. Systems are strongly encouraged to pair this population level measure with periodic chart audits to insure that the 'assess' and 'act on' of what matters aligns with the spirit of the 4Ms.
% of older adults assessed for high-risk medication use	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who have been assessed for high risk medications as per the 4Ms description at least once per stay, on change in condition and on addition of new medication.	In systems where the assessment for high risk medications is automated and results in an Automate EMR alert, it is encouraged that response to the alert is tracked to insure the automated system is resulting in the 'act on' desired

% Pts on high risk medications with Pharmacist/clinician review	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period AND who have been flagged as having a current prescription for a high risk medication. Note: this definition does not include Emergency Departments.	Patients in the denominator who have been reviewed by a pharmacist or clinician.	If the system has another process for 'ACT ON' related to the Medication M they are encouraged to track a measure that aligns to that practice in place of this measure.
% of older adults on any of the targeted medications *Alternative:* % of older adults on none of the targeted medications	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who are discharged with a high risk medication on their medication list. Alternative: Patients in the denominator who are discharged with a high risk medication **NOT** on their medication list.	Systems may wish to additionally track the % of patients admitted with a high risk medication to compare the rates on admission and on discharge as a proxy for deprescription efforts.
% of older adults assessed for delirium	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who have been assessed for delirium every 12 hours during the totality of their hospital stay as per the 4Ms description approved for the setting of care.	
% of older adults assessed for Mobility	Patients 65 yrs and older with length of stay greater than or	Patients in the denominator who have been assessed for mobility	

	equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	at least once per hospital stay and on change of condition as per the 4Ms description approved for the setting of care.	
% older adults mobilized at least 3 times/day (as appropriate)	Patients 65 yrs and older with length of stay greater than or equal to 24hours who are present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period. Note: this definition does not include Emergency Departments.	Patients in the denominator who have been mobilized 3 times per day for the length of their hospital stay	Based on the mobility assessment, some patient may not be appropriate for 3xday mobilization. Those patient may be excluded from this measure. Systems may choose to compliment this measure with periodic audit and feedback around meeting mobility goals for those in this category.
Outcome Measures			
30-day all-cause readmission	Patients 65 yrs and older discharged from a hospital during the measurement period	Number of patients in the denominator who are readmitted to a specific set of hospitals within 30 days of discharge for any reason	If the Site has yet to implement the 4Ms on all units, systems would benefit from limiting inclusion in the denominator to patients discharged from units actively testing and implementing the 4Ms.
Average length of stay	Patients 65 yrs and older who are discharged from the hospital site during the measurement period or who die in hospital site during the measurement period	Sum of length of stay for each patient in the denominator, calculated as: a) date of discharge - date of admission + 1 for patients who are discharged, or b) date of death - date of admission + 1 for patients who die during the measurement period.	
Discharge Disposition: “% of Older adults discharged back to home	Patients 65 yrs and older discharged from a hospital during the measurement period	Number of patients in the denominator who are discharged to home.	

% of older adults with a diagnosis of delirium	Patients with length of stay greater than or equal to 1 day who are present on each unit used in calculation of the measure between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	Patients with positive result on delirium assessment	
Falls with major injury	total number of qualifying inpatient hospital days for patients aged 65 years and older	number of patients who experience one or more falls with a major injury during their hospital stay	This measure aligns to the definition used by CMS in the eCQM measure 'falls with major injury' system are encouraged to leverage data already track for this purpose and stratify by age for patient 65+. This measure is calculated as a rate with the following equation: Number of falls with major injury _____ X 100 Total number of qualifying inpatient hospital days
Rate of pressure ulcers	The total number of quality episodes for patients	The number of patients with one or more Stage 2-4 pressure ulcers, or unstageable ulcers, that are new or worsened since the beginning of the quality episode	This measure aligns to the definition used by CMS in the eCQM measure 'Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury' system are encouraged to leverage data already track for this purpose and stratify by age for patient 65+.
Patient Experience/What Matters Act On	Patients 65 yrs and older responding to survey question	Patients responding 'top box' to question.	Systems are encouraged to choose a question(s) that represent the older adult perspective on if What Matter was acted on in their care. This can take the form of: • A measure from an existing patient experience survey that asks about communication and listening from providers • A new measure that specifically asks "did we ask and address what mattered most to you during your care?" • The integration of questions from the validate collaborate tool as found here

Appendix B: Detailed Ambulatory Care Measure

Measure	Denominator	Numerator	Notes
Process Measure			
% of older adults assessed for all 4Ms	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have been 'assessed' for all 4Ms as per the 4Ms description approved for the setting of care within the last 12 months or on change in condition.	
% of older adults with What matters documented	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have had what matters documented in their chart in the last 12 months and/or on change in condition, as per the 4Ms description approved for the setting of care.	The documentation of 'What matters' in the chart is an easier measure to be tracked at scale from electronic records. Systems are strongly encouraged to pair this population level measure with periodic chart audits to insure that the 'assess' and 'act on' of what matters aligns with the spirit of the 4Ms.
% of older adults screened for high-risk medication use	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have been assessed for high risk medications in the last 12 months and on change in condition, as per the 4Ms description approved for the setting of care.	In systems where the assessment for high risk medications is automated and results in an Automate EMR alert, it is encouraged that response to the alert are tracked to insure the automated system is resulting in the 'act on' desired

% older adults on high risk medications with Pharmacist/clinician review	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have been reviewed by a pharmacist or clinician.	If the system has another process for 'ACT ON' related to the Medication M they are encouraged to track a measure that aligns to that practice in place of this measure.
% of older adults on any of the targeted medications *Alternative:* % of older adults on none of the targeted medications	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have an active prescription for a high risk medication. Alternative: Patients in the denominator who do NOT have an active prescription for a high risk medication.	
% of older adults assessed for Cognition at least once every 12 months or upon change in condition	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have had cognition assessed in the last 12 months and on change in condition, as per the 4Ms description approved for the setting of care.	Patients who refuse the screen with documentation of refusal AND do not have a screen in the past 12 months can be excluded from the denominator.
% of older adults assessed for depression at least once every 12 months	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the	Patients in the denominator who have had assessed for depression in the last 12 months and on change in condition, as per the	Exclusions: Patients with active diagnosis of depression or bipolar disorder; patients currently in hospice; patients who refuse the screen with documentation of refusal and do not have

or upon change in condition	practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	4Ms description approved for the setting of care.	documentation of a screen within the past 12 months
% of older adults assessed for Mobility	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have had mobility assessed in the last 12 months and on change in condition, as per the 4Ms description approved for the setting of care.	
% of older adults with a documented mobility goal	All patients 65 yrs and older in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years) who have an office visit, home visit, or telemedicine visit with the practice during the measurement period	Patients in the denominator who have a mobility goal set and reviewed within the last 12 months and on change in condition.	
Outcome Measures			
Rate of emergency department (ED) visits (per 1000)	All patients in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years)	Number of ED visits by patients in the denominator in the measurement month	**Example calculation**: The proposed measurement period is monthly. Calculate the denominator, calculate the numerator, and normalize the rate. In August 2018, 2,000 patients considered to be patients of the primary care clinic were aged 65 years and older. For those 2,000 patients, there were 110 ED visits. So calculate: (110/2,000) x

			1,000 = 55 ED visits per 1,000 patients ages 65 years and older.
Rate of Facility free days	All patients in the population considered to be patients of the primary care practice (e.g., patient assigned to a care team panel and seen by the practice within the past three years)	Count the number of days a patient remains free from readmission to any VA facility within the specified period (e.g., 30 days) after discharge.	Calculated by dividing the numerator by the denominator and multiplying by 100. This measure was used in the following paper to track the impact of the 4Ms in VA facilities. More details can be found at the following link: Evaluating the relationship between facility Age-Friendly recognition and subsequent facility-free days in older Veterans - Burke - 2024 - Journal of the American Geriatrics Society - Wiley Online Library
Patient Experience/What Matters Act On	Patients 65 yrs and older responding to survey question	Patients responding 'top box' to question.	Systems are encouraged to choose a question(s) that represent patients perspective of if What Matter was acted on in their care. This can take the form of: • A measure or measures from an existing patient experience survey that asks about communication and listening from providers • A new measure that specifically asks "did we ask and address what mattered most to you during your care?" • The integration of questions from the validate collaborate tool as found here: collaborate_for_patients_5_anchor_point_scale.pdf

Appendix C: Detailed Nursing Home Measures

Measure	Denominator	Numerator	Notes
Process Measure			
% of older adults assessed for all 4Ms	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have been 'assessed' for ALL 4Ms as per the 4Ms description approved for the setting of care within the last 12 months or on change in condition. **SNF Residents:** Patients in the denominator who have been 'assessed' for ALL 4Ms as per the 4Ms description approved for the setting of care during the measurement period.	We suggest that this and below measures be track at least monthly. NHs may also wish to track the % of residents who are assessed for all 4Ms within 24-48 hours of admission for internal improvement work.
% of older adults with What matters documented (in chart or other location visible to care team)	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have 'what matters' documented in their chart on admission and on change in condition, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have 'what matters' documented in their chart for the current stay, as per the 4Ms description approved for the setting of care.	
Patient Experience Question related to addressing what matters	Patients 65 yrs and older responding to survey	Patients responding 'top box' to question.	NHs are encouraged to incorporate the following question into their existing patient surveys or to administer via other outreach processes that currently exist. Question: "did we ask and address what mattered most to you during your care?" Response options: Strongly Disagree, Disagree, Neither Agree nor disagree, Agree, Strongly Agree
% of older adults screened for high-risk medication use	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the	**LTC Residents:** Patients in the denominator who have been assessed for high risk medications on admission and after any change in condition or to	NH should consider tracking how long from time of admission it

	unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	medication, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have been assessed for high risk medications on admission and after any change to medication, as per the 4Ms description approved for the setting of care.	takes to conduct medication screening.
% Pts on high risk medications with Pharmacist/clinician review	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period who have a prescription for a high risk medication.	**LTC Residents:** Patients in the denominator who have had pharmacists review **SNF Residents:** Patients in the denominator who have had pharmacists review	
% of older adults on any of the targeted medications *Alternative:* % of older adults on none of the targeted medications	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have an active prescription for a high risk medications, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have an active prescription for a high risk medications, as per the 4Ms description approved for the setting of care.	
% of older adults assessed for delirium	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have been assessed for delirium on admission, after hospitalization, after change in medication and on any change in condition, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have been assessed for delirium on admission and every 12 hours, as per the 4Ms description approved for the setting of care.	

% of older adults assessed for dementia at least once every 12 months or upon change in condition	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have had a cognition assessment on admission, on change in condition, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have had a cognition assessment on admission, on change in condition, as per the 4Ms description approved for the setting of care.	
% of older adults assessed for depression at least once every 12 months or upon change in condition	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have had a depression screen on admission and on change in condition, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have had a depression screen on admission and on change in condition, as per the 4Ms description approved for the setting of care.	
% of older adults assessed for Mobility	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and 11:59 PM on the last day of the measurement period	**LTC Residents:** Patients in the denominator who have had a mobility assessment on admission and on change in condition, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have had a mobility assessment on admission and on change in condition, as per the 4Ms description approved for the setting of care.	NHs should also consider tracking the sharing of the mobility assessment and related mobility goals with the rest of the care team. This can be done through a periodic chart audit or a population based measure if one can be created. While the assessment of mobility might be reliable it is the connection of the assessment and mobility goals to the patient plan of care that is most important.
% older adults mobilized at least 3 times/day (as appropriate)	Adults 65 yrs and older with length of stay greater than or equal to 1 day present on the unit between 12:01 AM on the first day of the measurement period and	**LTC Residents:** Patients in the denominator who have been mobilized at least 3 times per day, as per the 4Ms description approved for the setting of care. **SNF Residents:** Patients in the denominator who have been mobilized at least 3 times per day, as	

	11:59 PM on the last day of the measurement period	per the 4Ms description approved for the setting of care.	
Outcome Measures *Note: Below are a few suggested measures pulled from the current CMS quality measures. Nursing Homes are invited to choose alternate measures if they feel they better align with their strategic priorities aligned to AFHS.* Nursing home should use the definitions that align to the CMS quality measures found here Quality Measures | CMS			
Short Stay			
Percent of Short-Stay Residents Who Were Re-Hospitalized after a Nursing Home Admission Percent of Short-Stay Residents Who Have Had an Outpatient Emergency Department Visit Percent of Residents Who Newly Received an Antipsychotic Medication Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury			
Long Stay			
Number of Hospitalizations per 1,000 Long-Stay Resident Days Number of Outpatient Emergency Department Visits per 1,000 Long-Stay Resident Days Percent of Residents Who Received an Antipsychotic Medication Percent of Residents Experiencing One or More Falls with Major Injury Percent of High-Risk Residents with Pressure Ulcers Percent of Residents Who Were Physically Restrained Percent of Residents Who Have Depressive Symptoms Percent of Residents Who Used Antianxiety or Hypnotic Medication Percent of Residents with Pressure Ulcers			

Appendix D: Detailed Convenient Care Measures

Measure	Denominator	Numerator	Notes
Process Measure			
% of older adults who are assessed for the 4Ms	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have been assessed for all 4Ms as per the 4Ms description approved for the setting of care.	
% of older adults with What matters documented (in chart or other location visible to care team)	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have had what matters for the visit documented in their chart, as per the 4Ms description approved for the setting of care.	The documentation of 'What matters' in the chart is an easier measure to be tracked at scale from electronic records. Systems are strongly encouraged to pair this population level measure with periodic chart audits to insure that the 'assess' and 'act on' of what matters aligns with the spirit of the 4Ms.
% of older adults assessed for high-risk medication use	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have been assessed for high risk medications at the visit, as per the 4Ms description approved for the setting of care.	In systems where the assessment for high risk medications is automated and results in an Automate EMR alert, it is encouraged that response to the alert are tracked to insure the automated system is resulting in the 'act on' desired
% of older adults assessed for dementia at least once every 12 months or upon change in condition	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have had cognition assessed in the current visit, as per the 4Ms description approved for the setting of care.	Patients who refuse the screen with documentation of refusal AND do not have a screen in the past 12 months can be excluded from the denominator.

% of older adults assessed for depression at least once every 12 months or upon change in condition	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have had assessed for depression at the current visit, as per the 4Ms description approved for the setting of care.	Exclusions: Patients with active diagnosis of depression or bipolar disorder; patients currently in hospice; patients who refuse the screen with documentation of refusal and do not have documentation of a screen within the past 12 months
% of older adults assessed for Mobility	All patients 65+ considered to be eligible patients of the clinic (e.g., patient presenting for a visit type included in 4Ms definition) who have an office visit or telemedicine visit with the clinic during the measurement period	Patients in the denominator who have had mobility assessed at the current visit and on change in condition, as per the 4Ms description approved for the setting of care.	
Outcome Measure *Note: clinics/systems are encouraged to combine the outcome measures below with additional measures that show the impact of the 4Ms on the care of older adults based on the data that have available to them in their systems.*			
Rate of return visits to convenient care/urgent care	Count the number of patients who return to the clinic for any reason within the specified time frame (e.g., 30 days) after their initial visit.	Calculate the total number of unique patient visits during the same time frame.	This measures is calculated as a rate, the calculation is: Divide the numerator by the denominator and multiply by 100 to get the percentage rate of return visits.

Appendix E: Detailed Home Health Care Measures

Measure	Denominator	Numerator	Notes
Process Measure			
% of older adults assessed for all 4Ms	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been assessed for all 4Ms as per the 4Ms description approved for the setting of care.	This measure is a composite of the patient who are in the numerator for each of the Assessment measures below. Organizations should focus on the regions/territories or offices currently implementing the 4Ms for this and the following measures
% of older adults with What matters documented (in chart or other location visible to care team)	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been assessed for what matters at start of care, recertification, resumption of care and on change in condition, and had it documented in the common record.	The documentation of 'What matters' in the chart is an easier measure to be tracked at scale from electronic records. Systems are strongly encouraged to pair this population level measure with periodic chart audit to insure that the 'assess' and 'act on' of what matters aligns with the spirit of the 4Ms. Additionally Systems should pair the monitoring of the 'assess' of what matters with a patient reported measure that provides insight into if what matters was 'acted on' from the patient perspective. Options are presented in the outcome measure section under patient experience.
% of older adults screened for high-risk medication use	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been screened for high medications at start of care, recertification, resumption of care and on change in condition, as per the 4Ms care description and had that documented in the common record	
% older adults on high risk medications referred to clinician for review	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period and were flagged for having a current prescription for a high risk medication	Patients in the denominator who have been referred for clinician of pharmacist medication review.	Systems are encouraged to compliment this measure with other measures that reflect organizational policies related to medication education and review such as a medication management care plan or other standard process.

% of older adults on any of the targeted medications	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have a current prescription for a high risk medication as per the 4Ms care description.	
% of older adults screened for delirium	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been screened for delirium at start of care and on change in condition as per the 4Ms care description and had that documented in the common record.	
% of older adults screened for cognitive impairment	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been screened for cognitive impairment at start of care, recertification, resumption of care and on change in condition as per the 4Ms care description and had that documented in the common record.	Patients who refuse the screen with documentation of refusal can be excluded from the denominator. Patients who have a positive screen for delirium should have their cognition screen deferred until delirium has been resolved and therefore can be excluded from the denominator until delirium is resolved.
% of older adults screened for depression	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been screened for depression at start of care, recertification, resumption of care and on change in condition as per the 4Ms care description and had that documented in the common record.	Exclusions: Patients with active diagnosis of depression or bipolar disorder; patients who refuse the screen with documentation of refusal. Patients who have a positive screen for delirium should have their depression screen deferred until delirium has been resolved and therefore can be excluded from the denominator until delirium is resolved.
'Act on' for mentation	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period and were screened as requiring follow-up for Mentation Concerns.	Patients in the denominator who have had referral to, or provisions of supports as per organizational policies and resources.	Systems are encouraged to include a measure that that reflects a mentation care plan or review process unique to their system.

% of older adults screened for Mobility	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have been screened for mobility at start of care, recertification, resumption of care and on change in condition as per the 4Ms care description and had that documented in the common record.	
% of patients with a documented mobility goal or care plan added related to mobility improvement	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who have a mobility goal or mobility care plan documented in their chart.	Systems are encouraged to adapt this measure to match the specific care process that exist to act on mobility goal.
Outcome measures *Note: Below are a few suggested measures pulled from the currently requirements of the OASIS measure sets. HH agencies are invited to choose alternate measures if they choose.*			
Rehospitalization During the First 30 Days of Home Health	Number of home health stays that begin during the 3-year observation period for patients who had an acute inpatient hospital discharge within the 5 days prior to the start of the HH stay.	Number of home health stays for patients who have a Medicare FFS claim for an admission to an acute care hospital in the 30 days following the start of the home health stay.	Home Health Agencies are able to use the claims based OASIS measure: **Rehospitalization During the First 30 Days of Home Health (Claims-based).** The same definition applies as found in the current outcomes measures guide. Measures should be stratified by age to understand the variation by age brackets to support further improvement activities.
Rate of emergency department (ED) visits	Number of home health stays that begin during the 3-year observation period for patients who had an acute inpatient discharge within the 5 days prior to the start of the home health stay.	Number of home health stays for patients who have a Medicare FFS claim for outpatient emergency department use and no claims for acute care hospitalization in the 30 days following the start of the home health stay.	Home Health Agencies are able to use the claims based OASIS measure: **Emergency Department Use without Hospital Readmission During the First 30 Days of Home Health (Claims-based).** The same definition applies as found in the current outcomes measures guide. Measures should be stratified by age to understand the variation by age brackets to support further improvement activities.
Patient Experience/What Matters Act On	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period	Patients in the denominator who choose 'top box' for the designated question as chosen by the organization.	HH agencies are encouraged to choose a question(s) that represent patients perspective of if What Matter was acted on in their care. This can take the form of: • A measure or measures from an existing patient experience survey that asks about communication and listening from providers

			• A new measure that specifically asks “did we ask and address what mattered most to you during your care?” • The integration of questions from the validate collaborate tool as found here: collaborate_for_patients_5_anchor_point_scale.pdf
Change in Mobility	All patients 65 yrs and older in the population considered to be patients of the entity/organization who have a home visit during the measurement period		HH agencies are encouraged to track improvements in the Total Normalized Composite (TNC) Change in Mobility measure as 4Ms are being implemented in their care, using the definition already outlines in the AASIS measures set. Agencies might choose to focus on a different measure related to mobility to track the impact of the 4Ms if they feel it is better aligned to their focused improvement work.